

1623

#7/10s
RECEIVED
NOV 06 2001
TECH CENTER 1600/2900

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

ATTORNEYS AT LAW

1100 NEW YORK AVENUE, N.W. • WASHINGTON, D.C. 20005-3934

PHONE: (202) 371-2600 • FACSIMILE: (202) 371-2540 • www.skgf.com

ROBERT GREENE STERNE
EDWARD J. KESSLER
JORGE A. GOLDSTEIN
SAMUEL L. FOX***
DAVID K.S. CORNWELL
ROBERT W. ESMOND
TRACY-GENE G. DURKIN
MICHELE A. CIMBALA
MICHAEL B. RAY
ROBERT E. SOKOHL
ERIC K. STEFFE
MICHAEL Q. LEE
STEVEN R. LUDWIG

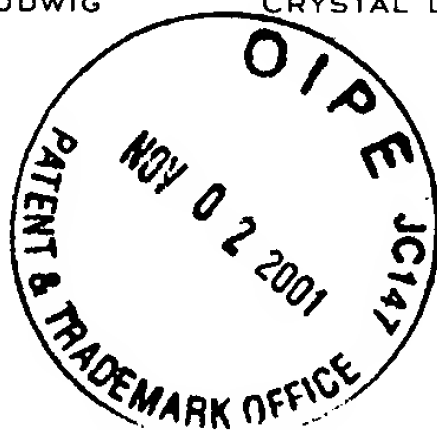
JOHN M. COVERT
LINDA E. ALCORN
ROBERT C. MILLONIG
MICHAEL V. MESSINGER
JUDITH U. KIM
TIMOTHY J. SHEA, JR.
PATRICK E. GARRETT
JEFFREY T. HELVEY*
HEIDI L. KRAUS
JEFFREY R. KURIN
PATRICK D. O'BRIEN
LAWRENCE B. BUGAISKY
CRYSTAL D. SAYLES

EDWARD W. YEE
ALBERT L. FERRO*
DONALD R. BANOWIT
PETER A. JACKMAN
MOLLY A. MCCALL
TERESA U. MEDLER
JEFFREY S. WEAVER
KENDRICK P. PATTERSON
DONALD J. FEATHERSTONE
VINCENT L. CAPUANO
JOHN A. HARROUN*
ALBERT J. FASULO II*
ELDORA ELLISON FLOYD*

W. RUSSELL SWINDELL
THOMAS C. FIALA
BRIAN J. DEL BUONO*
VIRGIL L. BEASTON*
RYAN J. STAMPER*
REGINALD D. LUCAS*
THEODORE A. WOOD
ELIZABETH J. HAANES
BRUCE E. CHALKER
JOSEPH S. OSTROFF
KAREN R. MARKOWICZ**
SUZANNE E. ZISKA**
ANDREA J. KAMAGE**

NANCY J. SMITH**
JOSEPH M. HANRAHAN***
DOUGLAS M. WILSON**
ANN E. SUMMERFIELD**
CYNTHIA M. LUCHEZ**
HELENE C. CARLSON**
GABY L. LONGSWORTH**
DUSTIN T. JOHNSON**
MATTHEW J. DOWD**
AARON L. SCHWARTZ**

*LIMITED TO MATTERS
AND PROCEEDINGS BEFORE
FEDERAL COURTS & AGENCIES
**REGISTERED PATENT AGENT
***SENIOR COUNSEL



November 2, 2001

WRITER'S DIRECT NUMBER:

(202) 371-2560

INTERNET ADDRESS:

RESMOND@SKGF.COM

Commissioner for Patents
Washington, D.C. 20231

Re: U.S. Utility Patent Application
Appl. No. 09/845,157; Filed: May 1, 2001
For: **Thermostable Reverse Transcriptases and Uses Thereof**
Inventors: Smith *et al.*
Our Ref: 0942.5040001/RWE/MTT

Sir:

Transmitted herewith for appropriate action are the following documents:

1. Information Disclosure Statement (*in duplicate*);
2. List of references cited on Form PTO-1449 (15 sheets);
3. A copy of each reference cited on Form PTO-1449 (83 references); and
4. One (1) Return Postcard.

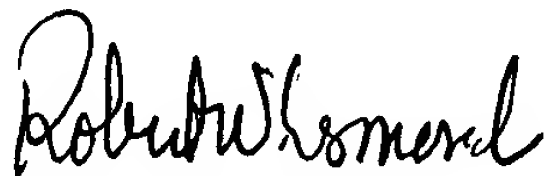
It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Commissioner for Patents
November 2, 2001
Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036. A duplicate copy of this letter is enclosed.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Robert W. Esmond
Attorney for Applicants
Registration No. 32,893

RWE/MTT/dnk
Enclosures



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED

NOV 0 6 2001

TECH CENTER 1600/2900

In re application of:

Smith *et al.*

Appl. No. 09/845,157

Filed: May 1, 2001

For: **Thermostable Reverse
Transcriptases and Uses Thereof**

Confirmation No. 2674

Art Unit: 1623

Examiner: To be assigned

Atty. Docket: 0942.5040001/RWE/MTT

Information Disclosure Statement

Commissioner for Patents
Washington, D.C. 20231

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98. A copy of each of these documents is provided.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith. It is further understood that the Examiner will consider information that had been cited or submitted to the U.S. Patent and Trademark Office in a prior application relied on under 35 U.S.C. § 120. 1138 OG 37, 38 (May 19, 1992).

This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No statement or fee is required.

The Examiner's attention is directed to the following co-pending U.S. Patent Applications:

09/677,574, filed October 3, 2000;
09/808,124, filed March 15, 2001; and
09/902,741, filed July 12, 2001,

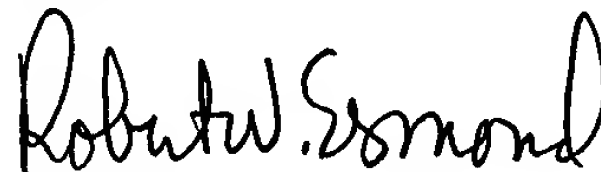
which are directed to related technical subject matter. Pursuant to 37 C.F.R. §1.98 (a) (2), legible copies of these applications are provided herein as documents AM15, AN15, and AO15, respectively. The identification of these U.S. Patent Applications is not to be construed as a waiver of secrecy as to those applications now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited applications and the art cited therein during examination.

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and to indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036. A duplicate copy of this pleading is enclosed.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Robert W. Esmond
Attorney for Applicants
Registration No. 32,893

Date: Nov. 2, 2001

1100 New York Avenue, N.W.
Suite 600
Washington, D.C. 20005-3934
(202) 371-2600

Applicant: Smith *et al.*

Application No.: 09/845,157

Filed: May 1, 2001

For: Thermostable Reverse Transcriptases and Uses Thereof

Due Date: None

Art Unit: 1623

Examiner: To be assigned

Docket: 0942.5040001

Atty: RWE/MTT

When receipt stamp is placed hereon, the USPTO acknowledges receipt of the following documents:

1. SKG&F Cover Letter (*in duplicate*);
2. Information Disclosure Statement (*in duplicate*);
3. List of references cited on Form PTO-1449 (15 sheets);
4. A copy of each reference cited on Form PTO-1449 (83 references); and
5. One (1) Return Postcard.



Please Date Stamp And Return To Our Courier

RECEIVED
JAN 21 2003
TECH CENTER 1600/2900

RECEIVED

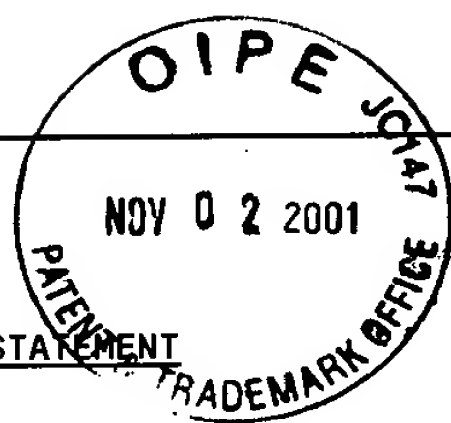
NOV 0 2 2001

TECH CENTER 1600/2900

Page 1 of 15

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.5040001APPLICATION NO.
09/845,157APPLICANT
Smith *et al.*FILING DATE
May 1, 2001GROUP
1623

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA1	5,244,797	09/14/1993	Kotewicz <i>et al.</i>	435	194	03/18/1991
	AB1	B1 5,244,797	08/25/1998	Kotewicz <i>et al.</i>	435	194	03/18/1991
	AC1	5,405,776	04/11/1995	Kotewicz <i>et al.</i>	435	252.33	01/24/1992
	AD1	B1 5,405,776	10/01/1996	Kotewicz <i>et al.</i>	435	194	01/24/1992
	AE1	5,668,005	09/16/1997	Kotewicz <i>et al.</i>	435	194	03/12/1996
	AF1	6,063,608	05/16/2000	Kotewicz <i>et al.</i>	435	194	02/10/1997
	AG1	6,136,582	10/24/2000	Gao <i>et al.</i>	435	194	01/20/1998
	AH						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AI1	WO 98/47912	10/29/1998	WIPO			Yes No
	AJ1	WO 99/10366	03/04/1999	WIPO			Yes No
	AK						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AL	1	Arion, D., <i>et al.</i> , "The K65R Mutation Confers Increased DNA Polymerase Processivity to HIV-1 Reverse Transcriptase," <i>J. Biol. Chem.</i> 271:19860-19864, American Society for Biochemistry and Molecular Biology (1996)
	AM	1	Bakhanashvili, M., and Hizi, A., "The fidelity of the reverse transcriptases of human immunodeficiency viruses and murine leukemia virus, exhibited by the mispair extension frequencies, is sequence dependent and enzyme related," <i>FEBS</i> 319:201-205, Elsevier Science Publishers B.V. (1993)
	AN	1	Bakhanashvili, M., and Hizi, A., "A possible role for cysteine residues in the fidelity of DNA synthesis exhibited by the reverse transcriptases of human immunodeficiency viruses type 1 and type 2," <i>FEBS</i> 304:289-293, Elsevier Science Publishers B.V. (1992)
	AO	1	Bakhanashvili, M., <i>et al.</i> , "Mutational studies of human immunodeficiency virus type 1 reverse transcriptase: the involvement of residues 183 and 184 in the fidelity of DNA synthesis," <i>FEBS Lett.</i> 391:257-262, Elsevier Science Publishers B.V. (1996)
	AP	1	Bakhanashvili, M., and Hizi, A., "Fidelity of the RNA-Dependent DNA Synthesis Exhibited by the Reverse Transcriptases of Human Immunodeficiency Virus Types 1 and 2 and of Murine Leukemia Virus: Mismatch Extension Frequencies," <i>Biochem.</i> 31:9393-9398, American Chemical Society (1992)

EXAMINER

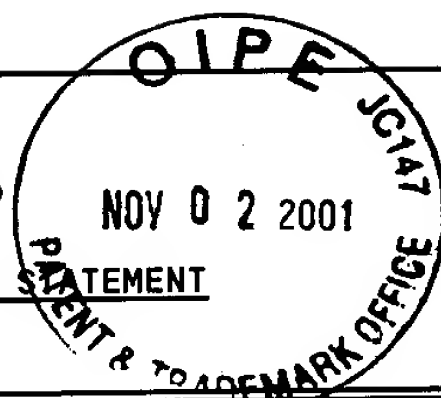
DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

RECEIVED

Page 1 of 15
NOV 06 2001

TECH CENTER 1600/2900



FORM PTO-1449
INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.5040001

APPLICATION NO.
09/845,157

APPLICANT
Smith *et al.*

FILING DATE
May 1, 2001

GROUP
1623

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AI						Yes No
	AJ						Yes No
	AK						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AL	2	✓	Barnes, W.M., "The fidelity of <i>Taq</i> polymerase catalyzing PCR is improved by an N-terminal deletion," <i>Gene</i> 112:29-35, Elsevier Science Publishers B.V. (1992)
	AM	2	✓	Basu, S., <i>et al.</i> , "Sulphydryl groups in the template-primer-binding domain of murine leukemia virus reverse transcriptase," <i>Biochem. J.</i> 296:577-583, The Chemical Society, London (1993)
	AN	2	✓	Bebenek, K., <i>et al.</i> , "Reduced Frameshift Fidelity and Processivity of HIV-1 Reverse Transcriptase Mutants Containing Alanine Substitutions in Helix H of the Thumb Subdomain," <i>J. Biol. Chem.</i> 270:19516-19523, American Society for Biochemistry and Molecular Biology (1995)
	AO	2	✓	Bebenek, K., <i>et al.</i> , "The Fidelity of DNA Synthesis Catalyzed by Derivatives of <i>Escherichia coli</i> DNA Polymerase I," <i>J. Biol. Chem.</i> 265:13878-13887, The American Society for Biochemistry and Molecular Biology (1990)
	AP	2	✓	Ben-Artzi, H., <i>et al.</i> , "Characterization of the double stranded RNA dependent RNase activity associated with recombinant reverse transcriptases," <i>Nucleic Acids Res.</i> 20:5115-5118, Oxford University Press (1992)

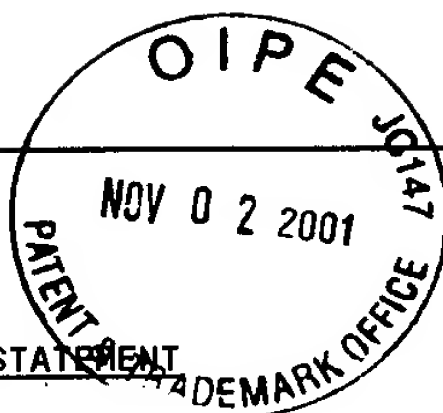
EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.5040001APPLICATION NO.
09/845,157APPLICANT
Smith *et al.*FILING DATE
May 1, 2001GROUP
1623

Page 3 of 5

TECH CENTER 1600/2900

RECEIVED
NOV 06 2001

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AI						Yes No
	AJ						Yes No
	AK						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

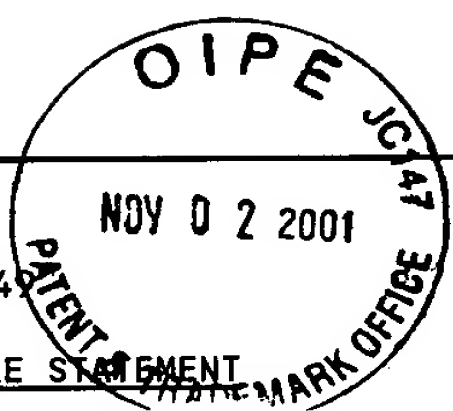
	AL	<u>3</u>	✓ Berger, S.L., <i>et al.</i> , "Reverse Transcriptase and Its Associated Ribonuclease H: Interplay of Two Enzyme Activities Controls the Yield of Single-Stranded Complementary Deoxyribonucleic Acid," <i>Biochemistry</i> 22:2365-2372, The American Chemical Society (1983)
	AM	<u>3</u>	✓ Blain, S.W., and Goff, S.P., "Effects on DNA Synthesis and Translocation Caused by Mutations in the RNase H Domain of Moloney Murine Leukemia Virus Reverse Transcriptase," <i>J. Virol.</i> 69:4440-4452, The American Society for Microbiology (1995)
	AN	<u>3</u>	✓ Caliendo, A.M., <i>et al.</i> , "Effects of Zidovudine-Selected Human Immunodeficiency Virus Type 1 Reverse Transcriptase Amino Acid Substitutions on Processive DNA Synthesis and Viral Replication," <i>J. Virol.</i> 70:2146-2153, The American Society for Microbiology (1996)
	AO	<u>3</u>	✓ Carroll, S.S., <i>et al.</i> , "A Mutant of DNA Polymerase I (Klenow Fragment) with Reduced Fidelity," <i>Biochem.</i> 30:804-813, American Chemical Society (1991)
	AP	<u>3</u>	✓ Carter, P. and Wells, J.A., "Engineering Enzyme Specificity by 'Substrate-Assisted Catalysis,'" <i>Science</i> 237:394-399, American Association for the Advancement of Science (1987)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

RECEIVED
 NOV 06 2001
 Page 4 of 7
 TECH CENTER 1600/2900



FORM PTO-1449
 INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
 0942.5040001
 APPLICATION NO.
 09/845,157
 APPLICANT
 Smith *et al.*
 FILING DATE
 May 1, 2001
 GROUP
 1623

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						

FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AI						Yes No
	AJ						Yes No
	AK						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
AL	<u>4</u>	✓	Chen, Y., and Marion, P.L., "Amino Acids Essential for RNase H Activity of Hepadnaviruses Are Also Required for Efficient Elongation of Minus-Strand Viral DNA," <i>J. Virol.</i> 70:6151-6156, The American Society for Microbiology (1996)
AM	<u>4</u>	✓	Chowdhury, K., <i>et al.</i> , "Elucidation of the Role of Arg 110 of Murine Leukemia Virus Reverse Transcriptase in the Catalytic Mechanism: Biochemical Characterization of Its Mutant Enzymes," <i>Biochemistry</i> 35:16610-16620, American Chemical Society (1996)
AN	<u>4</u>	✓	Creighton, S., <i>et al.</i> , "Base Mismatch Extension Kinetics," <i>J. Biol. Chem.</i> 267:2633-2639, American Society for Biochemistry and Molecular Biology (1992)
AO	<u>4</u>	✓	DeStefano, J.J., <i>et al.</i> , "Parameters that influence processive synthesis and site-specific termination by human immunodeficiency virus reverse transcriptase on RNA and DNA templates," <i>Biochimica et Biophysica Acta</i> 1131:270-280, Elsevier Science Publishers B.V. (1992)
AP	<u>4</u>	✓	Diaz, L., and DeStefano, J.J., "Strand transfer is enhanced by mismatched nucleotide at the 3' primer terminus: a possible link between HIV reverse transcriptase fidelity and recombination," <i>Nucleic Acids Res.</i> 24:3086-3092, Oxford University Press (1996)

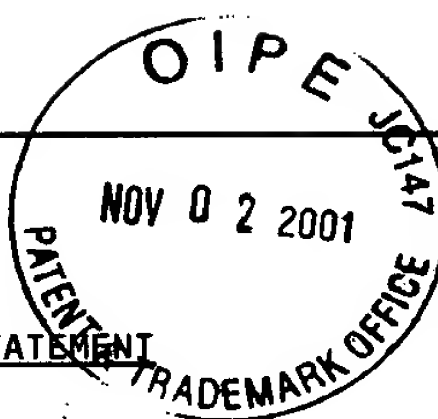
EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

RECEIVED

Page 5 of 1
NOV 06 2001

TECH CENTER 1600/2900

FORM PTO-1449
INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.
0942.5040001APPLICATION NO.
09/845,157APPLICANT
Smith *et al.*FILING DATE
May 1, 2001GROUP
1623

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AI						Yes No
	AJ						Yes No
	AK						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

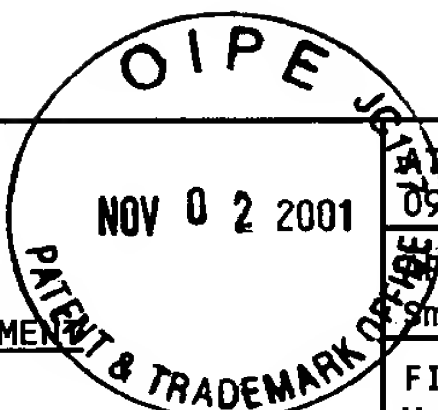
	AL	<u>5</u>	✓ Drosopoulos, W.C., and Prasad, V.R., "Increased Polymerase Fidelity of E89G, a Nucleoside Analog-Resistant Variant of Human Immunodeficiency Virus Type 1 Reverse Transcriptase," <i>J. Virol.</i> 70:4834-4838, The American Society for Microbiology (1996)
	AM	<u>5</u>	✓ Drosopoulos, W.C., and Prasad, V.R., "Increased Misincorporation Fidelity Observed for Nucleoside Analog Resistance Mutations M184V and E89G in Human Immunodeficiency Virus Type 1 Reverse Transcriptase Does Not Correlate with the Overall Error Rate Measured In Vitro," <i>J. Virol.</i> 72:4224-4230, The American Society for Microbiology (1998)
	AN	<u>5</u>	✓ Eckert, K.A., and Kunkel, T.A., "Fidelity of DNA synthesis catalyzed by human DNA polymerase α and HIV-1 reverse transcriptase: effect of reaction pH," <i>Nucleic Acids Res.</i> 21:5212-5220, Oxford University Press (1993)
	AO	<u>5</u>	✓ Eger, B.T., <i>et al.</i> , "Mechanism of DNA Replication Fidelity for Three Mutants of DNA Polymerase I: Klenow fragment KF(exo+), KF(polA5), and KF(exo-)," <i>Biochem.</i> 30:1441-1448, American Chemical Society (1991)
	AP	<u>5</u>	✓ Feng, J.Y., and Anderson, K.S., "Mechanistic Studies Examining the Efficiency and Fidelity of DNA Synthesis by the 3TC-Resistant Mutant (184V) of HIV-1 Reverse Transcriptase," <i>Biochemistry</i> 38:9440-9448, The American Chemical Society (July 1999); Published on the web on June 30, 1999.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

RECEIVED
NOV 06 2001
Page 5 of 15
TECH CENTER 1600 2900



FORM PTO-1449
INFORMATION DISCLOSURE STATEMENT

PATENT DOCKET NO.
0942.5040001

APPLICATION NO.
09/845,157

APPLICANT
Smith *et al.*

FILING DATE
May 1, 2001

GROUP
1623

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AI						Yes No
	AJ						Yes No
	AK						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AL	<u>6</u>	✓	Finston, W.I. and Champoux, J.J., "RNA-Primed Initiation of Moloney Murine Leukemia Virus Plus Strands by Reverse Transcriptase In Vitro," <i>J. Virology</i> 51:26-33, American Society for Microbiology (1984)
	AM	<u>6</u>	✓	Gao, G., and Goff, S.P., "Replication Defect of Moloney Murine Leukemia Virus with a Mutant Reverse Transcriptase That Can Incorporate Ribonucleotides and Deoxyribonucleotides," <i>J. Virol.</i> 72:5905-5911, The American Society for Microbiology (1998)
	AN	<u>6</u>	✓	Gerard, G.F., <i>et al.</i> , "cDNA Synthesis by Cloned Moloney Murine Leukemia Virus Reverse Transcriptase Lacking RNase H Activity," <i>Focus</i> 11:66-69, Life Technologies, Inc. (1989)
	AO	<u>6</u>	✓	Gerard, G.F., <i>et al.</i> , "Influence on Stability in <i>Escherichia coli</i> of the Carboxy-Terminal Structure of Cloned Moloney Murine Leukemia Virus Reverse Transcriptase," <i>DNA</i> 5:271-279, Mary Ann Liebert, Inc. (1986)
	AP	<u>6</u>	✓	Gerard, G., <i>et al.</i> , "cDNA Synthesis by Moloney Murine Leukemia Virus RNase H-Minus Reverse Transcriptase Possessing Full DNA Polymerase Activity," <i>Focus</i> 14:91-93, Life Technologies, Inc. (1992)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

RECEIVED

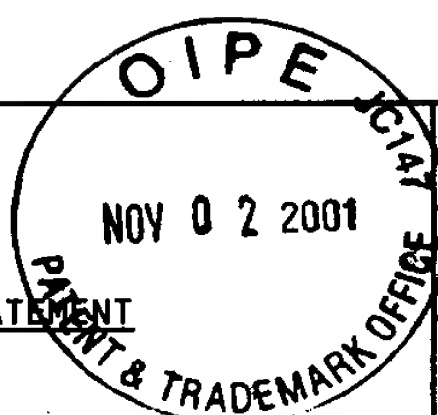
NOV 06 2001

TECH CENTER 1600/2900

Page of

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.5040001APPLICATION NO.
09/845,157APPLICANT
Smith *et al.*FILING DATE
May 1, 2001GROUP
1623

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AI						Yes No
	AJ						Yes No
	AK						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AL	<u>7</u>	Gerwin, B.I., <i>et al.</i> , "Mutant of B-Tropic Murine Leukemia Virus Synthesizing an Altered Polymerase Molecule," <i>J. Virology</i> 31:741-751, The American Society for Microbiology (1979)
	AM	<u>7</u>	Goff, S.P., "Retroviral Reverse Transcriptase: Synthesis, Structure, and Function," <i>J. Acquired Immune Deficiency Syndrome</i> 3:817-831, Raven Press (1990)
	AN	<u>7</u>	Goff, S.P. and Lobel, L.I., "Mutants of murine leukemia viruses and retroviral replication," <i>Biochimica et Biophysica Acta</i> . 907:93-123, Elsevier Science Publishers B.V. (1987)
	AO	<u>7</u>	Goobar-Larsson, L., <i>et al.</i> , "Disruption of a Salt Bridge between Asp 488 and Lys 465 in HIV-1 Reverse Transcriptase Alters Its Proteolytic Processing and Polymerase Activity," <i>Virology</i> 196:731-738, Academic Press (1993)
	AP	<u>7</u>	Götte, M., <i>et al.</i> , "The M184V Mutation in the Reverse Transcriptase of Human Immunodeficiency Virus Type 1 Impairs Rescue of Chain-Terminated DNA Synthesis," <i>J. Virol.</i> 74:3579-3585, The American Society for Microbiology (April 2000)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

RECEIVED
NOV 08 2001
TECH CENTER 160012900

FORM PTO-1449
INFORMATION DISCLOSURE STATEMENT

NOV 02 2001
PATENT & TRADEMARK OFFICE

ATTY. DOCKET NO.
0942.5040001

APPLICATION NO.
09/845,157

APPLICANT
Smith et al.

FILING DATE
May 1, 2001

GROUP
1623

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AI						Yes No
	AJ						Yes No
	AK						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AL	<u>8</u>	Guo, J., et al., "Defects in Primer-Template Binding, Processive DNA Synthesis, and RNase H Activity Associated with Chimeric Reverse Transcriptases Having the Murine Leukemia Virus Polymerase Domain Joined to <i>Escherichia coli</i> RNase H," <i>Biochemistry</i> 34:5018-5029, The American Chemical Society (1995)
	AM	<u>8</u>	Hamburgh, M.E., et al., "The influence of 3TC-resistance mutations E89G and M184V in the human immunodeficiency virus reverse transcriptase on mispair extension efficiency," <i>Nucleic Acids Res.</i> 26:4389-4394, Oxford University Press (1998)
	AN	<u>8</u>	Hite, J.M., et al., "Factors affecting fidelity of DNA synthesis during PCR amplification of d(C-A) _n ·d(G-T) _n microsatellite repeats," <i>Nucleic Acids Res.</i> 24:2429-2434, Oxford University Press (1996)
	AO	<u>8</u>	Hsu, M., et al., "Higher fidelity of RNA-dependent DNA mispair extension by M184V drug-resistant than wild-type reverse transcriptase of human immunodeficiency virus type 1," <i>Nucleic Acids Research</i> 25:4532-4536, Oxford University Press (1997)
	AP	<u>8</u>	Jin, J., et al., "Analysis of the Role of Glutamine 190 in the Catalytic Mechanism of Murine Leukemia Virus Reverse Transcriptase," <i>J. Biol. Chem.</i> 274:20861-20868, American Society for Biochemistry and Molecular Biology (July 1999)

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

RECEIVED

NOV 06 2001

TECH CENTER 1600/2900



FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.5040001APPLICATION NO.
09/845,157APPLICANT
Smith *et al.*FILING DATE
May 1, 2001GROUP
1623

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AI						Yes No
	AJ						Yes No
	AK						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AL	2	✓	Kaushik, N., <i>et al.</i> , "Role of Glutamine-151 of Human Immunodeficiency Virus Type-1 Reverse Transcriptase in RNA-Directed DNA Synthesis," <i>Biochemistry</i> 36:14430-14438, The American Chemical Society (1997)
	AM	2	✓	Kaushik, N., <i>et al.</i> , "Role of Glutamine 151 of Human Immunodeficiency Virus Type-1 Reverse Transcriptase in Substrate Selection As Assessed by Site-Directed Mutagenesis," <i>Biochemistry</i> 39:2912-2920, The American Chemical Society (March 2000); Published on the web on February 22, 2000.
	AN	2	✓	Kaushik, N., <i>et al.</i> , "Tyrosine 222, a Member of the YXDD Motif of MuLV RT, Is Catalytically Essential and Is a Major Component of the Fidelity Center," <i>Biochemistry</i> 38:2617-2627, The American Chemical Society (March 1999); Published on the web on February 10, 1999.
	AO	2	✓	Kerr, S.G., and Anderson, K.S., "RNA Dependent DNA Replication Fidelity of HIV-1 Reverse Transcriptase: Evidence of Discrimination between DNA and RNA Substrates," <i>Biochemistry</i> 36:14056-14063, The American Chemical Society (1997)
	AP	2	✓	Kim, B., <i>et al.</i> , "Fidelity of Mutant HIV-1 Reverse Transcriptases: Interaction with the Single-Stranded Template Influences the Accuracy of DNA Synthesis," <i>Biochemistry</i> 37:5831-5839, The American Chemical Society (1998); Published on the web on April 9, 1998.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

RECEIVED
 NOV 6 2001
 TECH CENTER 160012800

FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 0942.5040001	APPLICATION NO. 09/845,157
U.S. PATENT DOCUMENTS		
U.S. PATENT DOCUMENTS		

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA					
	AB					
	AC					
	AD					
	AE					
	AF					
	AG					
	AH					

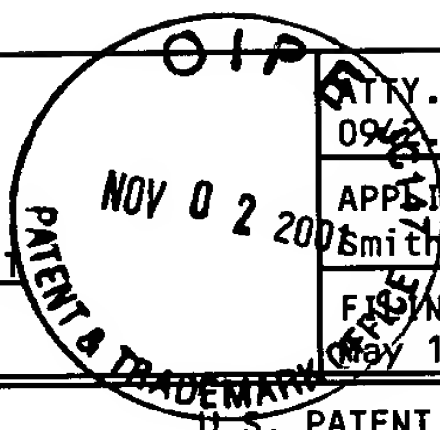
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AI					Yes No
	AJ					Yes No
	AK					Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
	AL	10	Kim, B., <i>et al.</i> , "New Human Immunodeficiency Virus, Type 1 Reverse Transcriptase (HIV-1 RT) Mutants with Increased Fidelity of DNA Synthesis," <i>J. Biol. Chem.</i> 274:27666-27673, American Society for Biochemistry and Molecular Biology (September 1999)
	AM	10	Levin, J.G., <i>et al.</i> , "Murine Leukemia Virus Mutant with a Frameshift in the Reverse Transcriptase Coding Region: Implications for <i>pol</i> Gene Structure," <i>J. Virology</i> 51:470-478, American Society for Microbiology (1984)
	AN	10	Lewis, D.A., <i>et al.</i> , "Uniquely Altered DNA Replication Fidelity Conferred by an Amino Acid Change in the Nucleotide Binding Pocket of Human Immunodeficiency Virus Type 1 Reverse Transcriptase," <i>J. Biol. Chem.</i> 274:32924-32930, The American Society for Biochemistry and Molecular Biology (November 1999)
	AO	10	Martin-Hernandez, A.M., <i>et al.</i> , "Human immunodeficiency virus type 1 reverse transcriptase: role of Tyr115 in deoxynucleotide binding and misinsertion fidelity of DNA synthesis," <i>EMBO J.</i> 15:4434-4442, Oxford University Press (1996)
	AP	10	Martin-Hernandez, A.M., <i>et al.</i> , "Mispair extension fidelity of human immunodeficiency virus type 1 reverse transcriptases with amino acid substitutions affecting Tyr115," <i>Nucleic Acids Res.</i> 25:1383-1389, Oxford University Press (1997)

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449
INFORMATION DISCLOSURE STATEMENT



ATTY. DOCKET NO.
09/845,5040001

APPLICATION NO.
09/845,157

APPLICANT
Smith et al.

FILING DATE
May 1, 2001

GROUP
1623

RECEIVED
NOV 06 2001
TECH CENTER 1600/2500
Page 12 of 15

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AI						Yes No
	AJ						Yes No
	AK						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AL	12	Pop, M.P., and Biebricher, C.K., "Kinetic Analysis of Pausing and Fidelity of Human Immunodeficiency Virus Type 1 Reverse Transcription," <i>Biochemistry</i> 35:5054-5062, The American Chemical Society (1996)
	AM	12	Prasad, V.R. and Goff, S.P., "Linker insertion mutagenesis of the human immunodeficiency virus reverse transcriptase expressed in bacteria: Definition of the minimal polymerase domain," <i>Proc. Natl. Acad. Sci. USA</i> 86:3104-3108, The National Academy of Sciences of the USA (1989)
	AN	12	Quan, Y., et al., "Dominance of the E89G Substitution in HIV-1 Reverse Transcriptase in Regard to Increased Polymerase Processivity and Patterns of Pausing," <i>J. Biol. Chem.</i> 273:21918-21925, American Society for Biochemistry and Molecular Biology (1998)
	AO	12	Repaske, R., et al., "Inhibition of RNase H Activity and Viral Replication by Single Mutations in the 3' Region of Moloney Murine Leukemia Virus Reverse Transcriptase," <i>J. Virology</i> 63:1460-1464, American Society for Microbiology (1989)
	AP	12	Resnick, R., et al., "Involvement of Retrovirus Reverse Transcriptase-Associated RNase H in the Initiation of Strong-Stop (+) DNA Synthesis and the Generation of the Long Terminal Repeat," <i>J. Virology</i> 51:813-821, American Society for Microbiology (1984)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

RECEIVED

TECH CENTER 1600/2900
NOV 06 2001
Page 11 of 15

FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 0942.5040001	APPLICATION NO. 09/845,157
	APPLICANT Smith <i>et al.</i>	
	FILING DATE May 1, 2001	GROUP 1623

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						

FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AI						Yes No
	AJ						Yes No
	AK						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
AL	11	✓	Messer, L.I., <i>et al.</i> , "Functional Analysis of Reverse Transcription by a Frameshift <i>pol</i> Mutant of Murine Leukemia Virus," <i>Virology</i> 146:146-152, Academic Press, Inc. (1985)
AM	11	✓	Oude Essink, B.B., <i>et al.</i> , "Increased polymerase fidelity of the 3TC-resistant variants of HIV-1 reverse transcriptase," <i>Nucleic Acids Res.</i> 25:3212-3217, Oxford University Press (1997)
AN	11	✓	Pandey, V.N., <i>et al.</i> , "Role of Methionine 184 of Human Immunodeficiency Virus Type-1 Reverse Transcriptase in the Polymerase Function and Fidelity of DNA Synthesis," <i>Biochemistry</i> 35:2168-2179, The American Chemical Society (1996)
AO	11	✓	Patel, P.H., <i>et al.</i> , "Insights into DNA Polymerization Mechanisms from Structure and Function Analysis of HIV-1 Reverse Transcriptase," <i>Biochemistry</i> 34:5351-5363, The American Chemical Society (1995)
AP	11	✓	Perrino, F.W., <i>et al.</i> , "Extension of mismatched 3' termini of DNA is a major determinant of the infidelity of human immunodeficiency virus type 1 reverse transcriptase," <i>Proc. Natl. Acad. Sci. USA</i> 86:8343-8347, The National Academy of Sciences of the USA (1989)

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.	

RECEIVED

NOV 06 2001

TECH CENTER 1600/2900

Page 1 of 15

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

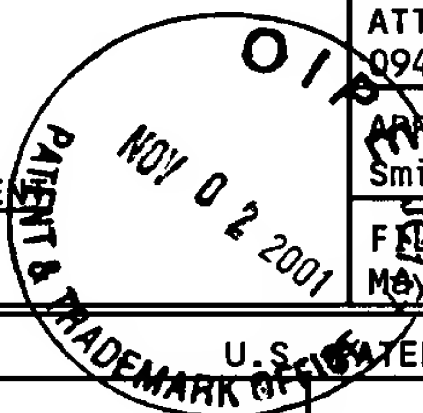
ATTY. DOCKET NO.
0942.5040001

APPLICATION NO.
09/845,157

APPLICANT
Smith *et al.*

FILING DATE
May 1, 2001

GROUP
1623



U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AI						Yes No
	AJ						Yes No
	AK						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AL	13	✓	Rezende, L.F., <i>et al.</i> , "The Impact of Multidideoxynucleoside Resistance-Confering Mutations in Human Immunodeficiency Virus Type 1 Reverse Transcriptase on Polymerase Fidelity and Error Specificity," <i>J. Virol.</i> 72:2890-2895, The American Society for Microbiology (1998)
	AM	13	✓	Rezende, L.F., <i>et al.</i> , "The influence of 3TC resistance mutation M184I on the fidelity and error specificity of human immunodeficiency virus type 1 reverse transcriptase," <i>Nucleic Acids Res.</i> 26:3066-3072, Oxford University Press (1998)
	AN	13	✓	Rubinek, T., <i>et al.</i> , "The fidelity of 3' misinsertion and mispair extension during DNA synthesis exhibited by two drug-resistant mutants of the reverse transcriptase of human immunodeficiency virus type 1 with Leu74→Val and Glu89→Gly," <i>Eur. J. Biochem.</i> 247:238-247, FEBS (1997)
	AO	13	✓	Schwartzberg, P., <i>et al.</i> , "Construction and Analysis of Deletion Mutations in the <i>pol</i> Gene of Moloney Murine Leukemia Virus: A New Viral Function Required for Productive Infection," <i>Cell</i> 37:1043-1052, MIT Press (1984)
	AP	13	✓	Sooknanan, R., <i>et al.</i> , "Fidelity of Nucleic Acid Amplification with Avian Myeloblastosis Virus Reverse Transcriptase and T7 RNA Polymerase," <i>BioTechniques</i> 17:1077-1080, 1083-1085, Eaton Publishing Co (1994)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

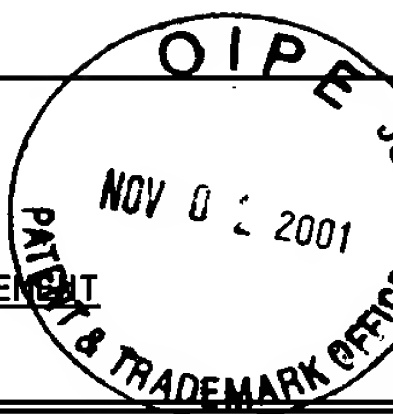
TECH CENTER 1600/2800

NOV 06 2001

RECEIVED

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.5040001APPLICATION NO.
09/845,157APPLICANT
Smith *et al.*FILING DATE
May 1, 2001GROUP
1623

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AI						Yes No
	AJ						Yes No
	AK						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AL	<u>14</u>	✓ Suzuki, M., <i>et al.</i> , "Low Fidelity Mutants in the O-Helix of <i>Thermus aquaticus</i> DNA Polymerase I," <i>J. Biol. Chem.</i> 272:11228-11235, The American Society for Biochemistry and Molecular Biology, Inc. (1997)
	AM	<u>14</u>	✓ Suzuki, M., <i>et al.</i> , "Fidelity Mutants in <i>Thermus aquaticus</i> DNA Polymerase I," <i>Ninth International Genome Sequencing and Analysis Conference, Hilton Head Island, South Carolina, September 13-16, 1997. Microbial and Comparative Genomics</i> 2:226, Abstract C-30, Mary Ann Liebert, Inc. (1997)
	AN	<u>14</u>	✓ Taube, R., <i>et al.</i> , "The fidelity of misinsertion and mispair extension throughout DNA synthesis exhibited by mutants of the reverse transcriptase of human immunodeficiency virus type 2 resistant to nucleoside analogs," <i>Eur. J. Biochem.</i> 250:106-114, FEBS (1997)
	AO	<u>14</u>	✓ Telesnitsky, A. and Goff, S.P., "RNase H domain mutations affect the interaction between Moloney murine leukemia virus reverse transcriptase and its primer-template," <i>Proc. Natl. Acad. Sci. USA</i> 90:1276-1280, The National Academy of Sciences of the USA (1993)
	AP	<u>14</u>	✓ Varela-Echavarria, A., <i>et al.</i> , "Comparison of Moloney Murine Leukemia Virus Mutation Rate with the Fidelity of Its Reverse Transcriptase <i>in Vitro</i> ," <i>J. Biol. Chem.</i> 267:24681-24688, American Society for Biochemistry and Molecular Biology (1992)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 0942.5040001/RWE/MTT	APPLICATION NO. 09/845,157
	APPLICANT Smith et al.	
	FILING DATE May 1, 2001	GROUP 1623

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
	AR	15	Wu, W., et al., "Human Immunodeficiency Virus Type 1 Nucleocapsid Protein Reduces Reverse Transcriptase Pausing at a Secondary Structure near the Murine Leukemia Virus Polypurine Tract," <i>J. Virol.</i> 70:7132-7142, American Society for Microbiology (1996)
	AS		
	AT		

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

RECEIVED

TECH CENTER 1600/2900

Page 45 of 45

NOV 06 2001

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.5040001APPLICATION NO.
09/845,157APPLICANT
Smith *et al.*FILING DATE
May 1, 2001GROUP
1623

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AI						Yes No
	AJ						Yes No
	AK						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AL	<u>15</u>	Wainberg, M.A., <i>et al.</i> , "Enhanced Fidelity of 3TC-Selected Mutant HIV-1 Reverse Transcriptase," <i>Science</i> 271:1282-1285, American Association for the Advancement of Science (1996)
	AM	<u>15</u>	Co-Pending U.S. Patent Application No. 09/677,574, filed October 3, 2000.
	AN	<u>15</u>	Co-Pending U.S. Patent Application No. 09/808,124, filed March 15, 2001.
	AO	<u>15</u>	Co-Pending U.S. Patent Application No. 09/902,741, filed July 12, 2001.
	AP		

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.